

SYNOPSIS

The thesis entitled “**Studies towards the total synthesis bioactive macrolides: (-)-exiguolide, (+)-cladospolide C, (+)-aspicilin and (+)-seimatopolide A**” has been divided into five chapters.

CHAPTER-I : Chapter **I** describes a brief introduction to bioactive natural macrolides and their construction (macrolactonization).

CHAPTER-II : Chapter **II** describes the “Formal total synthesis of (-)-exiguolide”.

CHAPTER-III : Chapter **III** describes the “Total synthesis of (+)-cladospolide C”.

CHAPTER-IV : Chapter **IV** describes the “Total synthesis of (+)-aspicilin”.

CHAPTER-V : Chapter **V** describes the “Total synthesis of (+)-seimatopolide A”.